Amendments to the Specification

Please replace the paragraph at page 12, line 24 through p. 13, line 10 with the following amended paragraph:

Another approach to fabricate a magnetic sensor utilizing the combination of magnetostrictive and piezoelectric materials is to start with piezoelectric, for example PZT ceramic fibers **12** made by injection molding as shown in Fig. 4a, and then to pack magnetostrictive material powders such as nickel or cobalt ferrites and magnetostrictive metal alloys or intermetallic compounds. The final process is to sinter the packed sample at proper elevated temperature. The top view of a final sample with array of piezoelectric fibers **12** surrounded by magnetostrictive materials **13** is shown in Fig. 4b. The sample can be used as a whole piece for large area sensors by connecting piezoelectrical fibers in parallel or as sensor array devices by addressing and reading out the piezoelectric fiber individually. By way of example, Fig. 4b illustrates a first set of piezoelectric rods or fibers 401, 402, 403 connected electrically in parallel to read-out circuit 410. A second sed of rods or fibers 403, 404, 405 is independently addressed and read out by read-out circuits 411, 412, 413. The array can also be sliced into individual sensors **14** as shown in Fig. 4c. The electrodes are made by metallizing the top and bottom of piezoelectric fibers.